

## ABSTRACT OF THE INVENTION

A transgenic animal, preferably a mouse, that expresses human antichymotrypsin (ACT) in brain tissues is provided, together with animal tissue-derived cell lines and progeny animals of said transgenic animal. Progeny are obtained by mating the transgenic animal with select animal strains used as models of Alzheimer's disease, related neurological disorders, or amyloidogenic diseases. Methods utilizing the parent and progeny animals and cells derived therefrom are disclosed for testing compounds for use as anti-inflammatory drugs, inhibitors of amyloidogenesis, and/or inhibitors of tau protein pathology associated with Alzheimer's disease, in the treatment of a variety of neurological diseases.